

AMENDED CLAIMS

[Received by the International Bureau on 11 February 2005 (11.02.05);
original claims 1-19 replaced by amended claims 1-15]

1. A method for treating or, partially or wholly, impregnating textile and/or footwear products intended to be worn on the human foot making use of an active deodorizing principle consisting of elementary sulphur or, in any case, a substance capable of liberating elementary sulphur, characterized in that said products are treated or impregnated with a composition comprising, besides said active principle, a polymeric binder for stably fixing said active principle to said products and releasing it gradually in the course of time.
2. The method according to claim 1, wherein said polymeric binder is an acrylic, silicone, butadiene or polyurethane resin, said active principle and said resin being distributed in a non-aqueous composition with which said products are impregnated or sprayed.
3. The method according to claim 1, wherein said polymeric binder is an acrylic, silicone, butadiene or polyurethane resin, said active principle and said resin being distributed in an aqueous bath in which said products are immersed.
4. The method according to claim 3, wherein said active principle in said aqueous bath has a concentration comprised between 0,3 and 1.0 g/l, said resin being a silicon resin and having a concentration comprised between about 10 and 20 g/l, said aqueous bath comprising also a cationic surfactant and a softener having a concentration of, respectively, between about 10 and 20 g/l and between about 2 and 5 g/l.
5. The method according to claim 4, wherein said aqueous bath is brought to a temperature of at least 40°C.
6. The method according to claim 3, wherein said active

active principle has a concentration comprised between 0,3 and 1.0 g/l, said resin being a silicon resin and having a concentration comprised between about 10 and 20 g/l, said aqueous bath comprising also a cationic surfactant and a softener having a concentration of, respectively, between about 10 and 20 g/l and between about 2 and 5 g/l.

13. The composition according to claim 11, wherein said active principle has a concentration comprised between 5 and 10 g/l and is emulsified with a non-ionic surfactant, 10 said resin being an emulsified acrylic resin and having a concentration comprised between about 3 and 5 g/l, the bath having a pH made slightly acid by means of acetic acid in case of wool-base products or a neutral pH in case of products with a cellulose base.

15 14. The composition according to claims 10 to 13, wherein said active principle is wettable micronized sulphur.

15. Textile and/or footwear products integrally or partially impregnated or treated with a composition in accordance with any of claims 10 to 14.

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1. A method for treating or, partially or wholly, impregnating textile and/or footwear products intended to be worn on the human foot making use of an active deodorizing principle consisting of elementary sulphur or, in any case, a substance capable of liberating elementary sulphur, characterized in that said products are treated or impregnated with a composition comprising, besides said active principle, a polymeric binder for stably fixing said active principle to said products and releasing it gradually in the course of time.
2. The method according to claim 1, wherein said polymeric binder is an acrylic, silicone, butadiene or polyurethane resin, said active principle and said resin being distributed in a non-aqueous composition with which said products are impregnated or sprayed.
3. The method according to claim 1, wherein said polymeric binder is an acrylic, silicone, butadiene or polyurethane resin, said active principle and said resin being distributed in an aqueous bath in which said products are immersed.
4. The method according to claim 3, wherein said active principle in said aqueous bath has a concentration comprised between 0,3 and 1.0 g/l, said resin being a silicon resin and having a concentration comprised between about 10 and 20 g/l, said aqueous bath comprising also a cationic surfactant and a softener having a concentration of, respectively, between about 10 and 20 g/l and between about 2 and 5 g/l.
5. The method according to claim 4, wherein said aqueous bath is brought to a temperature of at least 40°C.
6. The method according to claim 3, wherein said active

principle has a concentration comprised between 5 and 10 g/l and is emulsified with a non-ionic surfactant, said resin being an emulsified acrylic resin and having a concentration comprised between about 3 and 5 g/l, the bath having a pH made slightly acid by means of acetic acid in case of wool-base products or a neutral pH in case of products with a cellulose base.

7. The method according to claim 6, wherein said textile products, subsequently to said bath, are wrung and dried at a temperature of at least about 150°C in order to polymerize said acrylic resin.

8. The method according to claim 1, wherein said polymeric binder is a glue utilized for assembling a shoe or a part thereof.

15 9. The method according to any one of the preceding claims, wherein said active principle is wettable micronized sulphur.

10. A composition for partially or integrally treating textile and/or footwear products intended to be worn on the human foot, said composition making use of an active deodorizing principle consisting of elementary sulphur or, in any case, a substance capable of liberating elementary sulphur, characterized in that it comprises, in addition to said active principle, a polymeric binder for stably fixing said active principle on said products and releasing it gradually in the course of time.

11. The composition according to claim 10, wherein said polymeric binder is an acrylic, silicone, butadiene or polyurethane resin, said active principle and said resin being distributed in an aqueous bath in which said products are immersed.

12. The composition according to claim 11, wherein said

active principle has a concentration comprised between 0,3 and 1.0 g/l, said resin being a silicon resin and having a concentration comprised between about 10 and 20 g/l, said aqueous bath comprising also a cationic surfactant and a 5 softener having a concentration of, respectively, between about 10 and 20 g/l and between about 2 and 5 g/l.

13. The composition according to claim 11, wherein said active principle has a concentration comprised between 5 and 10 g/l and is emulsified with a non-ionic surfactant, 10 said resin being an emulsified acrylic resin and having a concentration comprised between about 3 and 5 g/l, the bath having a pH made slightly acid by means of acetic acid in case of wool-base products or a neutral pH in case of products with a cellulose base.

15 14. The composition according to claims 10 to 13, wherein said active principle is wettable micronized sulphur.

15. Textile and/or footwear products integrally or partially impregnated or treated with a composition in accordance with any of claims 10 to 14.